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Visualizing Spirit Entities: Naming, Classification, and Pictorial Representation of Pseudo-Natural Kinds in Nuaulu Cosmography

Roy Ellen

Abstract

This article re-examines the claim that supernatural entities can be treated as a semantic domain constituted of pseudo-natural kinds. The article does so in relation to the Nuaulu people of Seram, eastern Indonesia, discussing ways of describing, visualizing, inventorying, and classifying spirits. While humans and animals are the models on which spirits are based, other features associated with how they are perceived and experienced as non-material entities (overlapping, ambiguity, blurring, shape-shifting) restrict the applicability of an approach inspired by studies of ethnobiological classification. The idea that spirits are like natural kinds rests on how people describe their morphology, as well as their behaviour and habitat. Evidence presented for the conceptualization of spirit forms includes stylized drawings. Nuaulu data are compared with European-based traditions representing physical features of supernatural beings. Over time, these latter have become increasingly saturated with visual images, and have influenced popular renditions of the pseudo-natural kind theory.

Introduction

How people describe spirits suggests that many of their features are based on observations of humans and animals—morphological, behavioural, and ecological—and that there might be similarities in how they are grouped, comparable to those we find in folk classifications of natural kinds. In the ethnoscience tradition there are claims that spirit entities might be organized in ways reminiscent of folk classifications of biological organisms (Brown et al. 1976), while in cognitive and developmental psychology there are those who propose that spirits are universally treated as 'pseudo natural kinds' (Keil 1986; Boyer 1993). At the same time, other spirits—or spirits in general—seem to be anthropomorphic, showing affinities with some kind of human prototype, or combined animal/human prototype (see for example Boyer 1996; Guthrie

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and Porubanova 2022). Indeed, even spirits that are zoomorphic in their physical representation will be anthropomorphized.

The data on Nuaulu spirit forms discussed here were largely collected during fieldwork on the Indonesian island of Seram in 1970–71, although much supplemented during later episodes. The data set expanded markedly during the time I was researching Nuaulu ethnozoology, it being difficult to enquire about knowledge of animal forms without yielding related data on spirits, or to enquire about spirits without yielding data on animals. Additional data on the Nuaulu spirit world was acquired during work leading to the publication of *Nuaulu Religious Practices* (Ellen 2012).

This article re-examines the aforementioned basic arguments in the context of existing work worldwide, but particularly in South East Asia (for example Atran 1990, 47, 52, and 54; Forth 1998, 323; 2009, 493; Van Esterik 1982; Stanlaw and Yoddumnern 1985). I begin by outlining the relationship between spirits and ancestors. I discuss how Nuaulu describe spirits by introducing experimental data on their pictorial representation. I explore how we might inventory and classify spirit types, starting with naming. In particular, I identify perceptual overlaps between spirits and animals, and argue that while humans and animals are inevitably the models on which spirits are based, other factors associated with how spirits are perceived and experienced as non-material entities give rise to category overlaps, ambiguity, blurring, and shape-shifting. These features restrict the extent to which an approach from ethnobiological classification of living organisms will work when systematizing shared local knowledge of spirit naming, typological diversity, and domain organization.

The features attributed here to Nuaulu spirit forms appear in some sense to be universal. The comparative folklore literature includes attempts to make sense of the diversity of spirit forms in various cultural milieux worldwide. Different spirits are often characterized as beings with distinct morphologies and behaviour (for example Briggs 1976). However, some folklorists, such as Simon Young (2013), have cautioned against over-categorization of spirit forms achieved simply by compiling the many names and descriptions of supernatural beings described.

Talking about Spirits, Beginning with the Ancestors

Nuaulu presently constitute a population of mainly animist people living in a group of villages in south Seram, eastern Indonesia, and numbering about 2,500. Until the 1980s they were almost entirely non-literate, involved in a set of ritual practices and beliefs focused on the veneration of clan ancestral spirits. Along with living organisms, spirits inhabit the Nuaulu universe in every conceivable niche and relationship. People claim to see and hear them everywhere. Although I did not experience these things myself, I was sometimes present at the alleged discovery of a spirit perched in a tree or a bush, events that generated excitement in a crowd of onlookers. Thus, the credibility of spirit sightings is enhanced through group experiences (Levy, Mageo, and Howard 1996; Lohmann 2019).

To understand how Nuaulu make sense of their diverse universe of spirits we must first distinguish mostly benign ancestral clan spirits (guardian or tutelary spirits) from the rest. In this section, I provide a narrative overview of these and their roles before examining how Nuaulu perceive, label, and classify the remaining spirit forms. Other ethnographies of eastern Indonesia report similar distinctions. For example, Timo Kaartinen (2006, 220) separates spirit guardians, 'free' spirits (those that have never been human), and spirits of the dead for the people of Banda Eli in the Kei Islands. Also, in a comprehensive account of Nage spirits on Flores, Gregory Forth (1998, 149–53; 2009, 508) provides descriptions of what individual spirits reportedly look like, while discussing in some detail how classifications of people might be thought to overlap with spirits. But although he identifies some ambiguous categories, Forth is adamant that Nage perceive spirits and people as ontologically separate kinds of entity within separate classifications. It is difficult to be so emphatic in the case of the Nuaulu, where spirits can manifest physically as people just as they do as animals, while the physical and behavioural characteristics of humans are clearly reflected in the spirit world (see Lohmann 2003b).

Two terms of wide application used by Nuaulu to describe spirits, *saruana* and *sionata*, refer to dead ancestors, the terms sometimes being used interchangeably as the more inclusive category. Compared to free spirits, these come closest to a group of spirits upholding a particular social order, rather than challenging it (Levy, Mageo, and Howard 1996, 15). On a number of occasions people spoke to me as though the term saruana labelled the category of widest application, distinguishing it from saruana in the specific sense of sionata (elders; optionally *saruana sionate*), the undifferentiated dead. Saruana are often addressed and synonymized as sionata. But while sionata is also a collective term for all ancestral clan spirits, the spirits of the immediate jural superiors (the recently dead within the same ceremonial house and clan) are individually named entities constantly interacting with the living. They are mostly distinguished from sionata more generally by using the term saruana. It is saruana who reside in the *sokate* basket in ceremonial houses and who take possession of the bodies of spirit mediums (Ellen 2019a). Immediate jural superiors over time become intermediate ancestral spirits and then distant ancestors, and apart from founding ancestors eventually become nameless.

Recent dead are also referred to as the 'red ones' (*sio msinaea* or *sarua msinaea*), and may be grouped functionally. The way ancestral spirits are grouped and referred to varies between Nuaulu clans. There are clan-founding ancestors (*nusa upue*). Matoke clan-founding ancestral spirits in particular are identified with two brothers who descended from the sky at the beginning of the Nuaulu creation myth (Ellen 2012, 71). These are termed 'honoured of the island' (*nusa upua*).[1] The nusa upua also include a husband and wife couple, the spirits of whom dwell in the *suane* ceremonial house, the male from Matoke-hanaie and the female from Matoke-pina clans, each influencing events and receiving part of every pig, deer, or cassowary that has been killed. Other saruana include the chickens (both male and female) that brought back to life the younger brother in the creation myth. These are now the saruana who enter the bodies of Matoke mediums.

Every clan also has a spirit connected with female ritual (*nuhune*), the wife of the founding ancestor, dwelling in the fireplace. These are the 'honoured of the hearth' (*otue upue*). There are also male and female 'honoured of the nuhune' (*nuhune upua*). These oversee birth rituals and fertility (especially the hunting and food collecting for nuhune ceremonies such as those of childbirth and female puberty), although with variations between clans in their roles and in the mythic histories connected to their origin.

Ancestral spirits are incontrovertibly people, and imagined anthropomorphically. They are like humans in the sense that they are morally capricious, but they are someone's parents and therefore command respect. By and large, saruana or sionata are benevolent, although punishment may be swift if a ritual is carelessly or wrongly performed, if it is forgotten altogether, or if ancestors feel neglected. In these circumstances there are standard formulas for placation. Ancestral spirits are part of clan and community governance, and certainly of a system of social control (Ellen 2012, 68–72). They are part of everyday life: assisting subsistence activity, regulating sickness, warning of danger, frightening enemies, foretelling the future. Indeed, ancestral spirits of all kinds play a crucial role in determining overall health and welfare and whether people survive to reproduce not only themselves but their *numa onate* (ritual houses) and clans as well. All are said to be visible if they wish to be, making boundaries between them and living humans problematic. Their voices are often channelled through mediums. Despite their diverse embodiments and associations with place, ancestral spirits may accompany clan members when they travel, by hovering over the head.

Nuaulu recognize three types of saruana in terms of the mode of their death. There are sarua msinaea, the red ancestral spirits already mentioned: those who have died a good death 'on a mat' (*nimo mata kinoe*), and who have been given the proper mortuary rites. A second type are the 'honoured of the forest' (*wesia upua*), including those who have had a bad death on land and those who have drowned at sea ('elders of the sea bottom', *sio ona nua nosite*). A woman dying in childbirth resides underneath the house. *Nimoe* are spirits of the distant dead or those which have never been human. The spirits of bad deaths (*nimo painakite*), especially women who die in childbirth (*pina mnotune*), are described as 'honoured of the outside' (*upu nau manahane*). They too protect the living and enter the bodies of mediums, and are especially identified with the clans Peinisa, Sounaue, and Matoke. The third group are 'found ancestral spirits' (*sarua supu-supu*), also known as 'soft voice spirits' (*sarua nio manna*). These are of persons who got lost in the forest and never returned, and those who at the beginning of the world almost became people but did not quite make it.

Ghosts of the recently dead, *matiunu* (the shade of the corpse as opposed to the spirit resident in the rafters of the clan ritual house), are not considered dangerous in themselves, with two exceptions. Although the Nuaulu are afraid of them and of the cemetery where they reside, they are seen as confining themselves to mischievous pranks. The exceptions are the ghosts of a man killed by falling from a tree in the course of hunting cuscus (*kamanahune*), and of a woman and her offspring

who have died in childbirth (pina mnotune). With regard to this latter, Komisi Soumori told me a story about his great grandfather Sanata, who lived at the now long-vacated settlement of Atanopu. One day Sanata went to Somau (Tihun) to fetch sago. While he was there his younger sister died in childbirth. The double-spirit of the dead mother and child tried to enter Sanata's house and the whole village was so scared that everyone fled to the forest. The spirit then visited Sanata at Somau. Sanata saw them and thought it was just a woman with a child (they were quite visible). When he saw it was his sister's double-spirit he knew she had died in Atanopu. On the way home, on reaching the river Yoko, he met the double-spirit again, where the child cried and asked for food. The dead sister told Sanata that he should go and hunt a pig and give some to the spirit child. This he did and the spirit never visited the living again. It is normally the case that if a pina mnotune is seen by a human he or she will surely die, but in this case exoneration was at hand due to performance of a good deed.

Picturing Spirits

Nuaulu claim to see spirits, feel them, and hear them (for they speak, sing, howl, scream, and whisper). They do so during altered states of consciousness (in dreams, trances, when chewing betel, or when drunk), but just as frequently during episodes of 'alert consciousness' (Lohmann 2003a, 202); they can also be routinely persuaded by other often-shared sensory evidence of their presence (Lohmann 2000; 2003a, 193). They will claim that these are real experiences rather than fantasy, sometimes terrifying but mostly emotionally neutral. References to wind, smoke, light and luminosity, moving water, shivering, and fire are common. But how do Nuaulu know what spirit entities actually look like, and are the descriptions they offer consistent between different individuals?

People describe the morphology of spirits even if they do not normally produce physical images of them: they are gendered, attributed with colours, and accorded other distinctive features (such as distorted genitalia, hairiness, large eyes, and sharp claws). Others are more recognizably human, or resemble animals they have seen or that they know about. There are descriptions in myths and stories, both folktales and entertaining accounts based on individual experience. Descriptions of the attributes of spirits, their appearance as visual images rather than as verbal messages or vague feelings, enhance their 'factuality' (Geertz 1966, 4). Whenever these are repeated, they contribute to reasonably stable socially shared notions of what spirits look like. In some representations spirits are disembodied, ethereal entities (ghost-like, points of light or glowing patches), but others are very much embodied. What Nuaulu experience, therefore, is influenced by shared cultural models or 'schema', as defined for example by Claudia Strauss and Naomi Quinn (1998), which identify and organize shared experience throughout life, and which are subject to alteration as experience alters. Particular instances of spirit perception are encoded in episodic memory to make sense of future perception (Lohmann 2003a, 207). Such images are experienced

as conforming with expected categories but are schematic in allowing for alteration over time and between individuals

All this suggests fuzziness in how spirit kinds are routinely perceived, not only in relation to each other but in relation to all living organisms. Where spirits are those of individual ancestors or are entities that have previously been human, we might expect representations to be anthropomorphous. In séances these same ancestors (saruana) speak through the bodies of mediums and often imitate physical and speech characteristics (Ellen 2019a). However, the presence of spirits may also be detected through observing patches or pinpoints of moving light and shape-shifting. Spirits that are non-ancestral or have not previously been human can also be anthropomorphous, but some are zoomorphic. Although the body template for a spirit can be an existing familiar human or zoomorphic form, there is a tendency to conceptualize spirits as deformed transformations of anthropomorphs or zoomorphs. Valerio Valeri (2000, 23–30) has a slightly different take on Huaulu spirit entities described for the Manusela region of central Seram, which he regards as simultaneously disembodied and embodied, both human and animal, thus rejecting dualistic thinking.

One way of discovering how Nuaulu envisage spirits, apart from eliciting verbal descriptions, is to invite people to draw them. The pictures reproduced in Figures 1–4 were all drawn in 1970, between 16 April and 6 June, in the village of Rouhua. The artists were Napuae Soumori (born in 1945 and aged twenty-six at the time) and Saune Matoke-pina (born in 1955 and aged sixteen at the time). Neither of these two

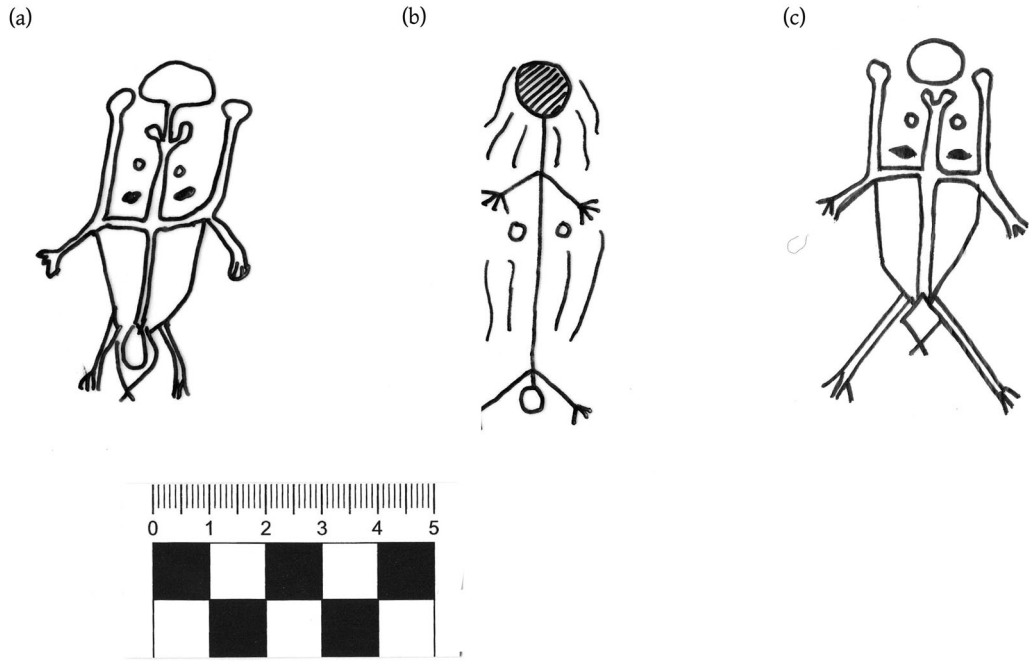

Figure 1. Three versions of (*sakahatene*) *pina mnotune*, each about 80 mm maximum length: (a) 16 May 1970, drawn by Napuae Soumori; (b) 15 May 1970, drawn by Saune Matoke-pina; (c) 15 July 1970, drawn by Napuae Soumori. Drawings modified by author.

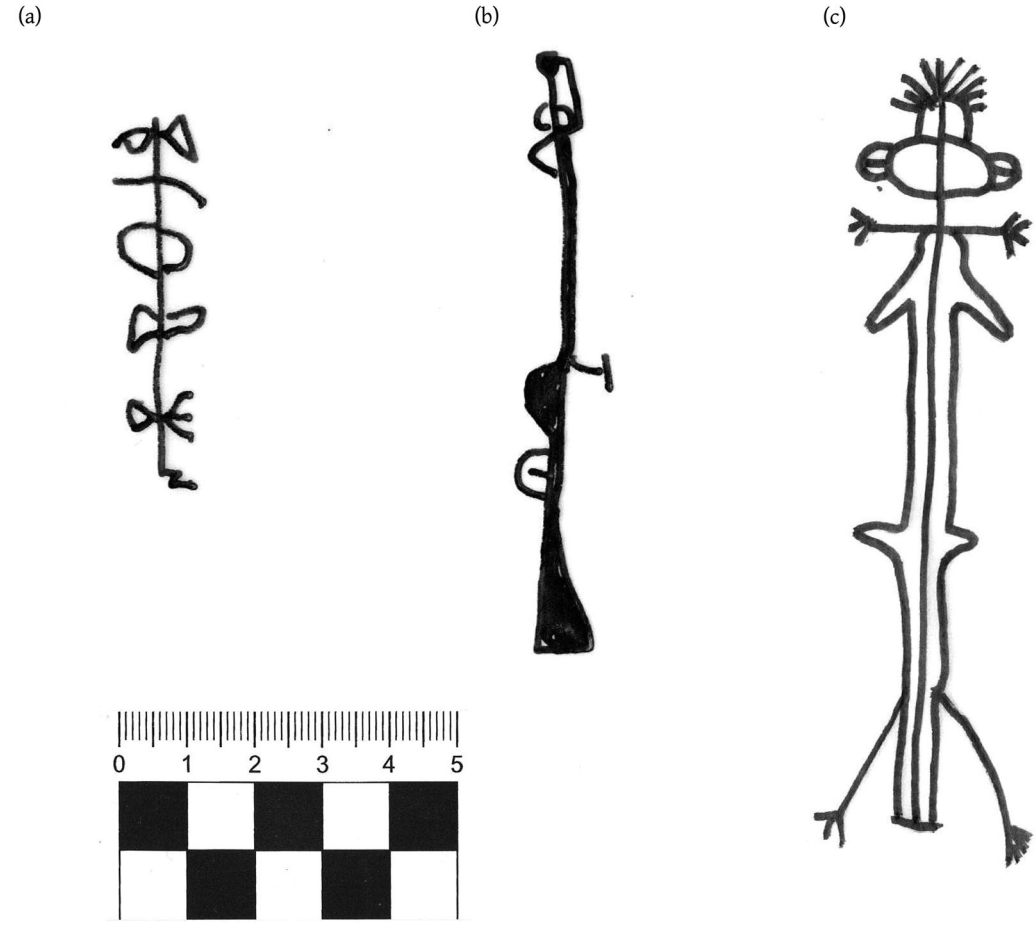

Figure 2. Three attempted versions of a *nimoe inai*, each about 80 mm maximum length: (a)–(c) 16 April 1970, drawn by Saune Matoke-pina. Drawings modified by author.

young men had any schooling. The images were drawn spontaneously in the context of discussions about spirits and were not part of a planned experiment. They were executed using ballpoint pen or pencil on whatever medium I had to hand, often flimsy typewriter carbon copy paper or pages from locally purchased school exercise books. Some were coloured. The completed drawings were annotated by me in the field, for example with names for body parts indicated by the artists, and then attached to the relevant page of a duplicate notebook. Some fifty-three years later they have been copied by me using professional 63 GSM A4 art quality tracing paper. In the process I have simplified the drawings slightly to remove extraneous matter, and ensured that the main features of each were clear by black-lining what were sometimes rather faint marks.[2]

Inviting Nuaulu subjects to draw spirits might seem to suffer several drawbacks as a research technique. The first is that there is no recent history of figurative art, and the second that until the 1980s the population was mostly non-literate. Nuaulu expression through the graphic and plastic arts, at least over the last one hundred years

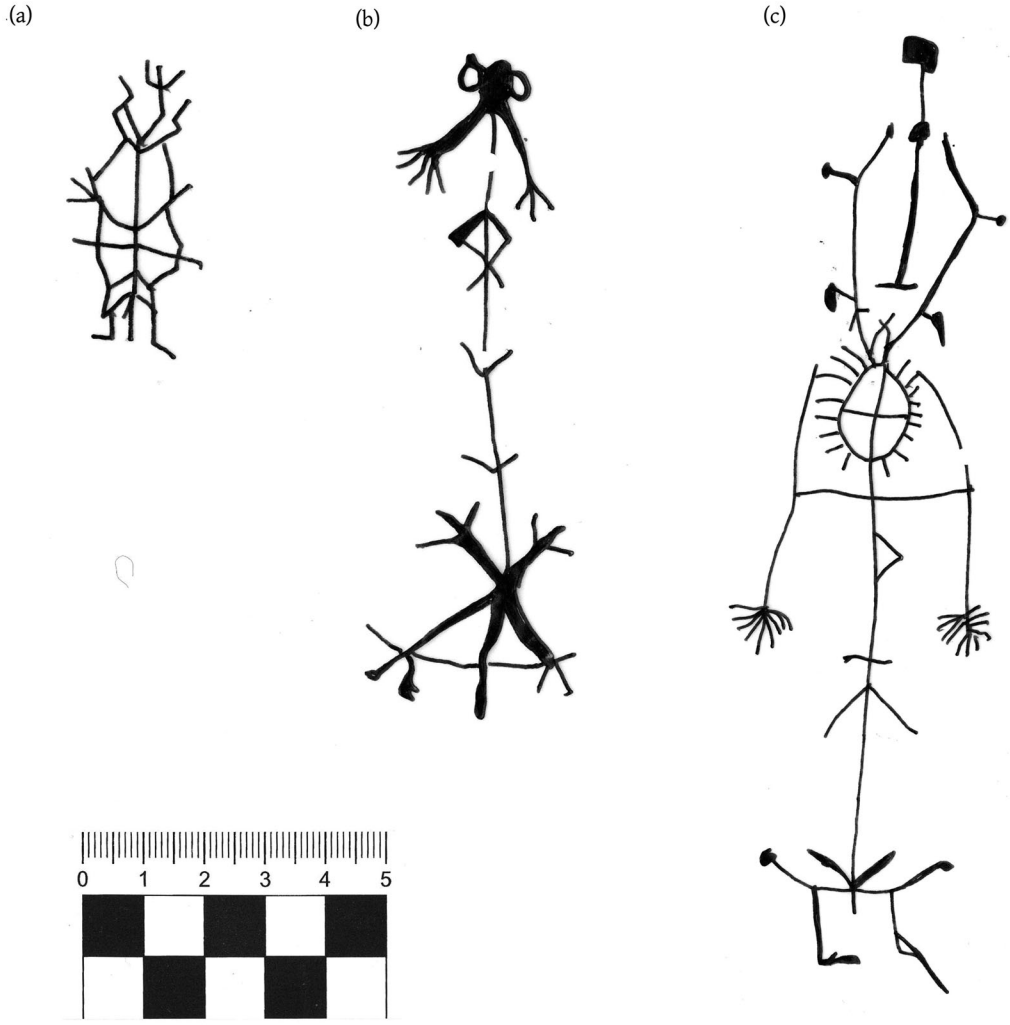

Figure 3. Quasi-anthropic forms of spirit: (a) 29 May 1970, a *setan* drawn by Napuae Soumori; (b) 6 June 1970, a *mukupone* drawn by Saune Matoke-pina; (c) 6 June 1970, a *sawan* (sea spirit) drawn by Saune Matoke-pina. Drawings modified by author.

where we have some evidence, has been largely restricted to geometric designs on shields and baskets. Occasionally, anthropomorphic and zoomorphic figures appear on shields (Ellen 2019b). There is also limited carving in bas-relief of totemic animals (e.g. the reticulated python) on the doors of sacred clan houses and on large drums. During the 1970s I would additionally see occasional anthropomorphic figures scrawled in charcoal on house posts or doors, which some reckoned to be images of spirits.

Nuaulu are aware of figurative art practices among other traditional peoples of Seram, such as the carving of zoomorphic figures on ritual houses in Yalahatani, and in the figurative art of Christians, both the images found in Catholic churches and the monumental religious cement sculpture and painted billboards of some Protestant settlements (Spyer 2008). There are also secular public artworks: statues

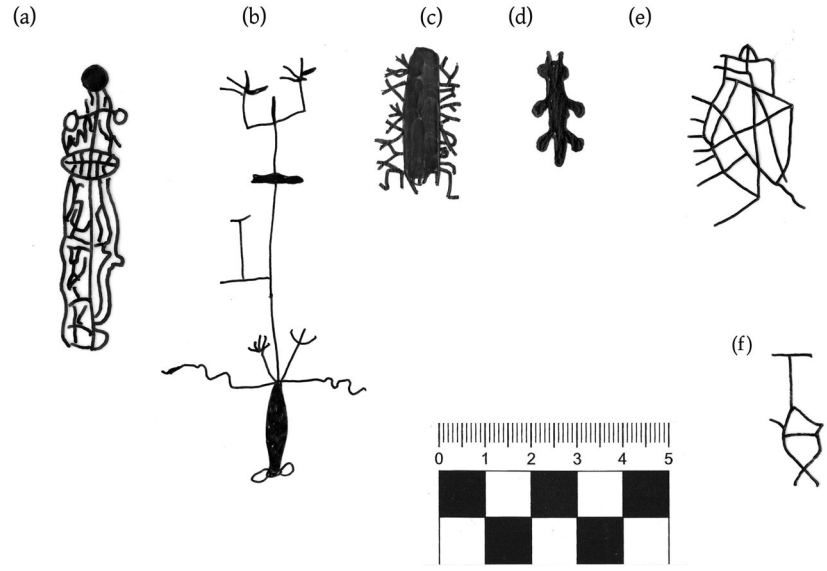

Figure 4. Quasi-anthropic and zoomorphic forms of spirit: (a) 6 June 1970, a *isanone naniai* drawn by Napuae Soumori; (b) 6 June 1970, a *navi* drawn by Saune Matoke-pina; (c) 18 May 1970, a *sinne inae*, drawn by Napuae Soumori; (d) 10 June 1970, an *inararai* drawn by Napuae Soumori; (e) 16 May 1970, a *nimo kohatene* drawn by Napuae Soumori; (f) 16 May 1970, a *mukene* drawn by Napuae Soumori. Drawings modified by author.

erected by state agencies and sometimes by communities themselves. These latter, however, are mainly developments since 1980, and there was little evidence of it at the time of my initial fieldwork in the 1970s. The closest verifiable and documented full-blown traditions of figurative art in which spirits and ancestral figures are extensively depicted through wood carving are from the islands of the Tanimbar group, from the south-western Moluccan archipelago (for example De Jonge and Van Dijk 1995), and from the Papuan Raja Ampat islands (Corbey 2017). These are well known from the literature and museum collections, but are quite unknown to the Nuaulu. However, during the 1970s Nuaulu seemed to have little difficulty interpreting and appreciating photographs and moving cinematographic images, while pictures from magazines were a popular adornment on walls. This may have some relevance to interpreting their competence in drawing figures on paper.

Apart from any evidence we might have for graphic representations of human or animal forms from the contemporary ethnographic record, there is a much older figurative tradition in the rock art found at various localities on Seram, including the Tala River area, and near Sawai (Seleman Bay) on the north coast within the Nuaulu language area (Röder 1938). More recently, rock art has been documented on the north coast of Buano Island, at Hatupatola in west Seram, and on Seram Laut in the east (Mujabuddawat and Peseletehaha 2021; Oktaviana, Lape, and Ririmasse 2018; Wattimena, Nussy, and Ferdinandus 2019). It is possible that Nuaulu know of these and similar sites from central Seram, but they have never voluntarily shared this information with me and neither have I sought it. The tentative dates for pictographs at all these sites are

Mesolithic and Neolithic (between 10,000 and 500 BP), and obviously there can be no direct connection or basis for inference between modern and prehistoric art. However, it is notable that among the diversity of forms in the rock art are stick and pin figures, and other features that I will refer to in the following discussion. But the dynamic curvilinear and full-bodied realist anthropomorphs with solid infill, found for example at Hatupatola and Dudumahan (Ballard 1988), are not present in any contemporary Nuaulu art forms.

Another drawback of inviting research subjects to draw pictures of spirits is the absence of literacy. Cultures of writing provide opportunities for using drawing instruments and paper, and encourage familiarity with two-dimensional representation and sharing images. In 1970 there were still people—some adult men but mainly women—who had only rudimentary spoken Ambonese Malay and no competence in standard Indonesian, and certainly no written competence. Basic literacy massively improved with the introduction of systematic schooling, other kinds of state penetration, and the rise of electronic media. In 1970, there were only a few individuals in Rouhua (all young men) with rudimentary literacy. By 1981, more than twelve children were attending school, and probably more from other Nuaulu villages. Despite communal conflict between 1999 and 2002, which saw some disruption in the advance of education, I would estimate that all Nuaulu born after 1980 have achieved some degree of literacy. Indonesian language competence had immediate consequences, some unexpected. For example, while before the 1980s I saw little evidence of drawing on walls in charcoal or chalk, with the advent of literacy graffiti became common (Figure 5).

There are a few existing documented attempts to use spontaneous drawings by non-literate people to gain insights into the conceptualization and imagination of spirit forms (see for example Sikes 1880, 21; Mead 1932, 176–77 and 183–84). More importantly, Corbey (2017) reports on Raja Ampat spirit drawings recovered in 2016 from the papers of Freerk Kamma, who had worked in the area adjacent to Seram between 1932 and 1942. These drawings were on paper from exercise books or notebooks (although older ones may have been drawn on pandan leaves), produced and used by ritual specialists as guides to the spirit world and when chanting invocations during healing (Guerreiro 2019, para. 10; Wellfelt 2019, 96). There have been many more attempts to document and interpret children's drawings that are potentially relevant: in Europe and America going back almost a century (for example Goodenough 1931; Deregowski 1978, 479), and some relating specifically to non-literate populations (for example Haddon 1904; Fortes 1940; Deregowski, Muldrow, and Muldrow 1972).[3] Only a few researchers, however, have relied upon data collected in populations where it is clear that the drawings were not contaminated by the presence of literacy and its impact on image-making in the wider society (for example Deregowski, Muldrow, and Muldrow 1972). Of particular interest are the Tallensi child drawings collected by Meyer Fortes (1940, 1981) in northern Ghana between 1934 and 1937, and re-examined by Jan Deregowski (1978). As Deregowski notes, the psychological literature continues to be biased by claims for cognitive universals where studies in non-literate populations are ignored. Here, I

Figure 5. One consequence of literacy: graffiti on the back of a door in the 'rumah pemerintah', Rouhua, March 1990.

attempt to use these cited empirical studies to shed light on Nuaulu perception of spirit entities.

The Nuaulu drawings of spirits are not by young children but rather by sixteen- and twenty-six-year-olds. Nevertheless, from the perspective of classical accounts of child development and from a culture saturated in visual images, they are undeniably 'child-like'. What is important here is less chronological age, or even Piagetian stages

of development, or any correlation between maturation and cognitive function, but experience of drawing at all and an absence of models on which to base the images. This is more or less what Fortes concluded on the basis of his early Tallensi work. We must reject of course, as did Fortes, the view that 'primitive thought' is intrinsically child-like or pre-logical, which some cognitive psychology and anthropological approaches (infamously that of Lucien Lévy-Bruhl) have in the past falsely implied. I have no idea whether Napuae and Saune had drawn spirits before, or if they had drawn anything much at all.

The Nuaulu drawings are similar to those presented by Fortes for non-literate Tallensi children, and are mainly of the spindly stick-and-pin, or matchstick, variety with occasional blobs and no facial features. These echo many of the human and animal figures collected by Alfred Cort Haddon (1904), as well as other examples from amongst rock art motifs of various sites on Seram and elsewhere in the Moluccas (for example Röder 1938, 22 and 25; Ballard 1988, figure 7.3.i). Using the terms adopted by Deregowski, Velo, and Halverson (1988, 308), the pictures are 'epitomic' rather than 'eidolic', or we might say typifications rather than idealizations, in that their three-dimensionality is not immediately apparent: they are outlines, pin or stick figures, or sometimes silhouettes (Figures 2b, 3b, and 4b–d). One characteristic common to both Nuaulu and Tallensi pictures is the apparent inability of the artist to apprehend the relationship between a flat surface and the visual percept or concept of the object being depicted. The images are two-dimensional, with no depth or perspective, and with little indication of volume. Also, proportions reflect the relative functional importance of the parts. For example, there are unusual head to body ratios, and fingers and toes may be as large as arms and legs. A more culturally specific example is that the vulva of the pina mnotune—spirit of a woman who has just died in the act of giving birth—is disproportionally large, reflecting its significance in the accompanying story (Figure 1). In his drawings Napuae refers to the vulva/vagina using the vulgar Ambonese Malay slang term *kelot*, but there are various words in Nuaulu for the vulva, vagina, and female genitalia as a whole (*tahua*, *tinai*, *ui*, *uim*), all taboo in mixed gender company and all seeming to vary depending on context, including the social position of those present, and whether clan-based prohibitions are operating.

Size can be significant and there is some attempt to indicate relative size, for example in Figure 4d. The *inararai* is drawn at about 25 mm, and the *sinne inae* at about twice the size. Since these are both shape-shifting spirit/animal forms, this may suggest a desire to indicate some real-life accuracy regarding size. Although there is a consensus that all zoomorphic spirits are generally smaller than humans, anthropomorphic spirits may be equal to human size or smaller. Some monsters may be larger.

It also appears important to the artists that they include certain essential defining or distinctive features, often exaggerated. Such features appear to be common in such drawings, and this may not always be related to elements mentioned in any accompanying just-so story, disproportionately large breasts and genitals being the most obvious. Artists do not appear to be simply reproducing a culturally acquired

representation, but representing the essence of the object (Deregowski, Velo, and Halverson 1988, 308), characterized not only by simplification but by inclusion of features regarded as essential. It is of what ought to be there rather than what is visible, making it reminiscent of some widely distributed prehistoric figurines (see for example Ucko 1968).

The drawings sometimes incorporate shapes and features (e.g. bilaterality) common in other Nuaulu art forms such as shields and patterned baskets, and these may have influenced execution in some cases (Figures 1, 2c, and 4c–d). Apart from the pina mnotune drawings there is little evidence that Nuaulu collectively learn to see objects in a particular way for the purposes of depictions, or that they learn to read repeated images in the way that, for example, Anthony Forge (1970, 269) contends for the Abelam; neither is there clear, culturally stylized colour-coding with multiple outlines as among the Abelam (Forge 1970, 285, figure 2). Another feature of some of the drawings is their complexity (e.g., Figures 3b–c and 4a–b). This suggests a detailed knowledge of what they believe spirits should look like, as well as an intention to include all their most distinctive features.

As Fortes remarked of the Tallensi drawings he solicited, so Nuaulu spirit drawings tend to be more ideogrammatic than pictorial. They comprise various parts and relations that are presumed to be present, and might be described as 'functional diagrams' (Fortes 1981, 62). In addition, it must be relevant that most spirit objects have to be imagined rather than simply copied, either in life or as a memory. What is evident from these examples is that although broadly conforming to the epitomic pattern presented by Fortes and Haddon for children drawing living people and animals, they do not necessarily depict features that are beyond the range of ordinariness—that is their understanding of real-life natural history. In other words, they are only rarely monsters with two heads; neither are they self-evident hybrids, such as satyrs and centaurs, the anomalousness of which often becomes symbolically significant in the sense associated with the insights of Mary Douglas (see for example Sperber 1996). Even though some may fly, unlike European fairies since the late eighteenth century, they are not given wings (Bown 2006, 45–47).

To what extent do the drawings I collected really reflect what Nuaulu think they are sensing when they say that they see spirits? It would require adult Nuaulu trained in figurative drawing to even partly answer this question. Given that there were few models for drawing visual images of any kind in the 1970s, and since the opportunities for actual drawing of anything, let alone spirits, were meagre, it is unlikely that the artists were copying previous representations of spirits that they had seen. However, it is remarkable that the images of pina mnotune in Figure 1 are broadly similar, especially Figure 1a and c. This suggests that even slight sharing can lead to conformist bias. It would be instructive to invite children and young adults in 2024, after forty years of unbroken primary schooling, to draw these same spirit entities. As there appears to be little difficulty for individuals to identify spirit types from the drawings, it would seem that what spirits look like is being reinforced to some degree through shared verbal descriptions and stories in which encounters are reported. We might expect that style of execution would be similar to the style

Fortes shows for his schooled children, and it is an open question as to whether such pictures would embody any of the distinctive features provided in the 1970 drawings. But if such drawings are 'unacculturated' in the sense that there are no existing models on which to base them, then they are important sources for studying human pan-cultural cognitive universals, which is what some psychologists studying child drawings seek to do.

Deregowski, Velo, and Halverson (1988) connect the epitomic features of children's drawings and the evidence of prehistoric rock art. While Nuaulu do not appear to be sufficiently familiar with the art found at rock art sites on Seram for it to have directly influenced their depiction of spirits, some of the similarities are striking, and may indicate underlying parallel and convergent cognitive processes. For example, the style of the *nimoe inai* (Figure 2a) resembles a figure in the rock art of Sawai (Röder 1938, 25, fig. III.10)

Although the sample of drawings examined here is small, it is clear that they provide evidence of a surprisingly detailed knowledge of the morphology of spirits, and an understanding that features are distinctive for each type, while varying along a continuum of anthropomorphs and more non-human zoomorphs. Much of the information used to execute the images must depend on shared verbal descriptions of spirit forms rather than private experiences uncommunicated to others. The images were not contested by others who saw them. That there are few models for such forms in Nuaulu art or in that of surrounding peoples makes this experiment even more arresting.

Inventorying Spirit Names

In interpreting the Nuaulu world of spirits, I adopt here a broadly cognitivist approach (for example Boyer 1994) based on the assumption that for the most part spirit or supernatural beings do not require a specialized mental or cultural apparatus to account for their characteristics and diversity. The terms 'supernatural being' or 'spirit entity/form' are used analytically to describe phenomena that people claim to exist, but for which there is ordinarily no material dimension that might be recorded or preserved as with a plant, fungal, or animal specimen.

Following classical ethnoscience procedures (for example Frake 1962), we can say that these constitute a semantic domain. Although there are spirit types that are unnamed, acknowledged by individual Nuaulu with characteristics not shared with others, we can only effectively make sense of spirit diversity by first trying to consistently identify named types. In other words, the semantic domain must be inferred from lexical evidence. This process might begin by producing a list of words used to describe different kinds of entity which from descriptions are spirit-like, and elaborating the list using standard elicitory queries: 'how many kinds of x are there?', 'is x a kind of y?', and so on. A way into this for me was to use dictionary definitions of spirits in Ambonese Malay (such as *roh* or *setan*) that Nuaulu would be familiar with and snowballing from there. However, as in eliciting other domains using similar techniques, so some entities are better examples of their kind than others,

while others still are marginal, hardly spirits at all but nevertheless entities with certain affinities to spirits. This is consistent with the core–periphery model of the category (Ellen 2006, 5 and 27).

The core grouping in such a model is of what we might call spirits in the strict sense. Here, I follow Robert Levy, Jeannette Mageo, and Alan Howard (1996, 11 and 14–16) in distinguishing spirits from gods, while recognizing that, comparatively, both are phenomena on a single continuum. Nuaulu recognize a single overarching superordinate supernatural authority, invoked in almost all important rituals and invocations (*Anahatana*), but no other entities that might be constituted gods in the definition offered by these writers. A wider grouping connects with more peripheral forms such as monsters and similar creatures where the physical evidence for their existence is contested (Levy, Mageo, and Howard 1996, 12; Mittman 2012, 4 and 9; Musharbash 2014). Of Nuaulu spirits, saruana or sionata (ancestral spirits, discussed earlier) are quite distinct and might be said to constitute a default grouping, the most frequently found in oral texts and mentioned in conversation. They are mainly invisible, always anthropomorphic, generally benign in intent, engaging casually with the living during spirit medium seances. These are the 'soft voices' (*nio manna*), sometimes long dead spirits, such as children of a founding ancestor, interacting with the living through a medium. My concern from here on, though, is with the remainder, the nimoe, a wide variety of spirits of the distant dead or spirits which have never been human (so-called free spirits).

Nuaulu verbs distinguish human and non-human subjects in the third person: for example, *sakahatena* are marked with a non-human prefix while actions of saruana are marked with a human prefix. Using ethnoscience protocols, we can first identify contrasting uninomials of the widest application that might divide up the conceptual space of supernatural beings, prompted by the query 'what names of spirits do you know?' The following lists are in alphabetical order, as at this stage we cannot assume a particular precedence or relationship between the categories to which the terms refer: *inaha*, *inae*, *matenu*, matiunu, *muisuane*, *nahai*, nimoe, *sakahatene*, *sawan*, sinne inae,[4] *tiunui*, and *upu.* Of these, two unambiguously labelled categories emerge as more complex and internally diverse than the others: those labelled (1) nimoe (Table 1) and (2) sakahatene (Table 2). I have recorded, in addition to saruana and sionata, forty-two terms overall for free spirits: ten for nimoe binomials, nine for sakahatene, and twenty-three residual polynomials of various lexical constructions (Table 3).

Unqualified further, the term nimoe refers to dead people already in a cemetery, to a corpse, or to a body of a recently dead person. Of the ten terms for nimoe, it is difficult not to see an association between *nimo sakahatene,* also a creature of the night which brings malaria, with mosquitos (*kunte*). The following story was told by Napuae about this spirit. One day Napuae's father was travelling from Rouhua to Lahati. During the night he was woken by a *nimo kahatene* and had a conversation with him/her. The nimo kahatene said that his father would fail to kill any pigs during his next hunting excursion and that the nimo kahatene would kill them all himself/herself. True enough, the next day Napuae's father went hunting. He encountered a pig, but it was already dead; he encountered another pig, and it was

	Term	Description	Notes
1	*nimo hahu muai*	Person killed by a wild pig	
2	*nimo hatu anoa ai anoa*	Spirit from inside a stone or tree	
3	*nimo kamanahune*	Person who has died from falling	
4	*nimo mata kinoe*	Person who has died on a pandanus mat	i.e. from a natural (or good) death
5	*nimo painakite*	Person who has died from an illness that has struck many people	e.g. a pandemic or epidemic, or a skin disease
6	*nimo pina mnotune*	Woman who has died in childbirth	
7	*nimo tinahane otoe*	Person who has died by having their head cut off	Reference to head-hunting
8	*nimo wesie upue*	Honoured of the forest, ancestral spirits of garden land	
9	*nimoe inai*	Dangerous spirit, normally invisible but an encounter with which results in death; inhabit large rivers such as the Pia and Upa, are black, and can be male or female	
10	*nimo (sa)kahatene*	Yellow evil spirit inhabiting the forest	Nuaulu are often bitten by them while hunting or collecting sago at Lahati or Somau (Tihun)

Table 1. Binomials for types of nimoe spirit recorded between 1970 and 2015. Names 1–8 are also listed in Bolton and Matoke (2005, 79).

already dead, and another … and yet another. He returned to the village of Rouhua and became ill with malaria. Later he re-visited Lahati where he soon died, and where he is now interred.

Nimoe, as opposed to saruana, are innately malevolent and inclined to hinder. Some have a taste for human flesh and kill without provocation, others are relatively mild. But just like venomous snakes and crocodiles, they are seen as one of the many hazards encountered by Nuaulu in their relations with the non-human world. They typically occupy habitats outside the village. Whenever a Nuaulu enters the forest, it is believed that the body is invaded by a nimoe of some kind. By contrast, nimoe are generally afraid of moving into the village, although people will perform magic anyway on returning to expel them.

The largest category of nimoe consists of spirits of the distant dead. These are collectively termed sakahatana, and are universally dangerous (Table 2). A sakahatene can be either male or female, living in the forest or dwelling in large stones scattered around the landscape. They are on the whole nocturnal, bite people, but normally just eat leaves.

Other Nuaulu spirit terms not generally subsumed under either nimoe or sakahatene are presented in Table 3.

Classifying Spirits

Nuaulu divide up the spirit universe in a number of cross-cutting ways. We can immediately see that a rigid distinction between guardian spirits and free spirits or

	Term	*Description*	*Notes*
1	*sakahate ai ukuna*	Spirit of the forest canopy	
2	*sakahate hatu anoe ai anoe*	Spirit living inside stone or tree	
3	*sakahate kamanahune*	Spirit of a person killed when falling from a tree	
4	*sakahate nimoe*	Spirit of a dead person	
5	*sakahate nimo tinahane otoe*	Spirit of a person whose head has been taken	
6	*sakahatene nisi*	Garden spirit	
7	*sakahate pina mnotune* (*niane*)	Spirit of a woman who has died in childbirth	Sometimes just called *pina mnotune,* this particularly perilous spirit was described to me as a hairy yellow female creature with a distended vulva, to be seen by whoever invites imminent death: 'they are like the wind, they are cold'
8	*sakahate pina mnotune nene anae* (*niane*)	Spirit of a child who has died during childbirth	Conjoined, 7 and 8 constitute a kind of double-spirit; see story related by Komisi in text
9	*sakahate wanu anae*	Woman who has died during childbirth	Connected to the widespread Indonesian concept *kuntianak* or *pontianak*; the term overlaps with the meanings attached to 7 and 8, but since the connotations of 'kuntianak' in wider Indonesian and Malay culture are quite elaborate and go beyond the connotations of other Nuaulu terms, it may be treated as somehow distinct (see for example Duile 2020)

Table 2. Binomials for different kinds of sakahatene spirit recorded between 1970 and 2015, and also listed in Bolton and Matoke (2005, 98).

other spirits of the dead, or between spirits that have been human and those that have never been human, is not always easy to sustain.

From the previous section we can see that local groupings of spirits can to some extent be inferred from the words used to describe them, as in the sub-categories of saruana (sionata), nimoe, and sakahatene. However, binomials created from these terms are not fixed and are used flexibly. Thus, 'kamanahune' can be lexically synonymous either with nimo kamanahune or *sakahate kamanahune*, or remain unqualified kamanahune, while *sakahate pina mnotune* can be lexically synonymous with *nimo pina mnotune* or remain unqualified pina mnotune, while *sakahate nimo tinahane otoe* can be the synonym of *tinahana otua*. Thus, to some extent, there is free variation in the use of terms between individuals and by the same individual on different occasions. That differences exist at all suggests inconsistencies in how nimoe and sakahatene, for example, are defined. As in any semantic domain, there are alternative names for the same entity. Many other spirits do not have fixed names to describe them, and may be invented ad hoc, including the many different kinds of spirit dwelling in forest and water habitats. At least eleven terminal categories for forest and sea spirits are recognized, none of which are easily or consistently named for the purpose of sharing information.

	Term	Description	Notes
(1)	*nimoe*		see Table 1
(2)	*sakahatene*		see Table 2
3	*ahane*	Kind of canine bitch, a female version of *mukupone*	see type 11; homophones of ahane also apply to certain lichens and ferns
4	*inaha*	Free spirit or departed soul (could overlap with several other terms)	
5	*inae*	Spirit of the sea or forest	
6	*inararai*	Spirit, usually invisible (but occasionally visible) and living in the forest under the ground	May kill a human: one evening in June 1970 Napuae alerted me to the presence of an inararai in a *Canarium* tree. It was causing great consternation among the children present. He mimicked its vocalization 'r … r … r … r …' (rolling his tongue). Although I never saw the creature, on other occasions the term inararai was applied to the ground frog *Litoria amboinensis* (Ellen 1993b, 121–22)
7	*isanone naniai*	Spirit entity living deep in the forest and which is a source of mosquitos	
8	*matenu*	Tree or stone spirit of the distant forest	
9	*muisuane*	Spirit of child that has been miscarried or aborted	A free-ranging child spirit, separated from its living or dead mother; double-spirits of dead mothers and children are discussed under 7 and 8
10	*mukene*	Red spirits (both male and female) inhabiting the bodies of people who are mad or drunk	No death is involved
11	*mukupone*	Male spirit dog that eats humans, and dwells in stones in forest	
12	*nahai*	Spirit, breath	Possibly synonymous with other terms; see inaha
13	*navi*	Spirits dwelling in the forest that are able to fly; inhabit trees, are active both day and night; large and eat humans	In stories these are male but it is thought that there must also be females; the name is not reported by Bolton and Matoke, and 'navi' is not obviously a Nuaulu word, the consonant /v/ being generally absent; maybe an example of a linguistic taboo, with an alternative term being used by other speakers or by all speakers in a different context
14	*nuae nosita inaia*	Sea spirit	
15	*sawan*	Sea spirit	Enter the house at night, are large and shine like a lamp through water; able to overturn a boat, and a dugout canoe is unable to escape one; Kaisa claims to have seen them.
16	*setan*	Often used for malign spirits of various kinds who have never been people, especially jinn of Muslim origin; Napuae explained that a setan is 'like the wind'	From Arabic via Malay setan (the Devil or Satan); not simply a Malay language equivalent of sakahatene
17	*sinne inae*	A dangerous spirit living in trees; literally meaning the 'house top thatch of a shield bug'	Example of the apparent conflation of a spirit with a kind of living creature, in this case certain scarab and long-horned beetles; see endnote 4

(*Continued*)

	Term	*Description*	*Notes*
18	*supana mwanae*	Person who has died caught in a spear trap	
19	*tinahana ohunui*	Spirit of person killed in war	
20	*tinahana otua*	Spirit of person killed in head hunting; in contrast to *sakahatane:* 'like flames in the night'	Together, 19 and 20 are *tinahahahua,* spirits of enemies slain in the course of head-hunting
21	*tiunui*	Maybe a synonym for *matiunu*	
22	*upu*	A good spirit	
23	*usa wenue titie*	Spirit of the smoke, literally 'heat of the fire string'	
24	*wesie nene inaia*	Forest spirits that have never been human	Sometimes collectively called setan (type 16, from Ambonese Malay 'Satan, evil spirit'); as with sakahatana they are 'like the wind, cold, but they can kill you'
25	*wesie upua*	Honoured of the forest, undifferentiated ancestral spirits of gardened forest	

Table 3. Nuaulu 'free' spirit terms.

As in ethnobiological classification, we can divide the domain of supernatural beings into primary, secondary, and perhaps tertiary categories, although it is not readily susceptible to the fixed levels devised by Brent Berlin for ranks (for example Berlin, Breedlove, and Raven 1973). Neither can the spirit world be divided taxonomically on the basis of degrees of shared morphological relatedness. While we might distinguish conceptually between spirits of the immediate jural superiors, the recently dead, the distant dead, and the spirits of those who have never been human, beyond this there seems to be no single prevailing arrangement. Some spirit entities are represented as pairs, such as with saruana and sionata (on the basis of ancestral chronology and social access): nuhune with saruana (on the basis of gender opposition), and sakahate pina mnotune with *sakahate pina mnotune nene anae* (on the basis of maternal relationship). Separately, *tinahahahua* is a grouping of all spirits who are the victims of head-taking, or alternatively have been killed by other humans, or who have succumbed to a bad death of some kind. We can also separate in terms of attributed morphology, anthropomorphic spirits that are obviously male, female, or androgynous, from those that are zoomorphic, and within the latter between those that can appear in animal form and those that never appear as real animals.

What is striking about descriptions of spirits is the regularity with which they are identified in terms of places where they are found: under stones, at water margins, within trees, under the ground, in cemeteries, and so on. Thus, spirit knowledge is integrated into a general spatial and environmental framework, with spirits perceived as having defined habitats within a landscape. Categories can be grouped along the kind of continua described among other populations for fauna: horizontally, or from centre to periphery—clan ritual house > village > village edge > cultivated land > near forest (and near water margins) > far forest (or far sea); or in terms of binary contrast—upstream or downstream, mountainward or seaward, below or above. Saruana are considered primarily as inhabitants of the village area, specifically the roof

space of clan ritual houses and the suane (the shared clan ritual house), but may also accompany villagers to the gardens and on journeys further afield. Saruana and nuhune are associated with the clan ritual house (numa onate), saruana with the village more generally, nuhune (being female) with the menstruation hut and village periphery, and matiunu (corpse ghosts or shades) with the cemetery at Hatu Nohue. Moving from village to garden land and on to forest always risks encountering more dangerous and unpredictable spirits (sakahatene, pina mnotune, kamanahune) and magical precautions are taken when crossing such boundaries (for example, Ellen 2012, 176).

Within a sacred clan house ancestral spirits are ordered three-dimensionally, with male saruana located towards the east (sunrise), and the most sacred and important towards the north-east, and female nuhune spirits to the west (sunset), and particularly towards the south-west. Vertically within the clan house, the most sacred saruana reside highest, in the roof space and rafters, often in special containers (sokate). Each usually takes up residence in a piece of red cloth (*sanneha*) which hangs on a rattan line above the *rine* shelf, although some are also placed in the sokate. Others reside in porcelain plates. Female nuhune spirits are lower, and matiunu and potentially dangerous intrusive spirits lower still, under the floor. The clans Soumori and Sounaue both have a resident *nusa hanoe upue*, the 'honoured of below the house', the first that of a woman who died in childbirth (pina mnotune), the second of a woman who died in menstrual seclusion (*nimo muisukane*). The gendering of spirits complements and reflects the roles of the living, males associated with the outside (hunting) and females with the inside (nurturing).

Outside the village there are also vertical distinctions to be made between more benign aerial and forest canopy spirits and the potentially malign spirits that dwell on the forest floor, in subterranean spaces, caves, and in the water margins, rivers, and sea. These are dimensions of classification that come with a moral evaluation, from the benign spirits of the clan house and village to the malevolent and uncontrollable spirits of distant forest or sea.

Thus, there is no one local classification of spirits, no overarching model, but rather numerous overlapping continua, pairings, and contrasts according to space, habitat, cosmographic dimension (e.g. centre–periphery, above–below, mountain–sea, sky–earth, sunset–sunrise, night–day), physical form, origin, gender, dangerousness, behaviour, and social connection, that all help people negotiate the tricky relations with extra-human powers. Together they somehow encompass the entire cosmos, as Nuaulu put it: *nuae hanaie*, *nuae pina* '[from] the male sea [in the north], [to] the female sea [in the south]'. There are different ways of thinking about the relations between spirits and between spirits and humans, each resorting to contingency as a context requires, and each resonating polyvalently.

As Forth has demonstrated for Nage on Flores, spirit forms are generally marked (that is accompanied by confidently portrayed images, presumably those more commonly encountered and represented) or unmarked, often identifiable through lexical pairings. Like Nuaulu spirit concepts, those of the Nage are overlapping and cross-cutting, producing 'composite images' (Forth 1998, 47 and 193). They demonstrate ambiguous

encompassment (often mutual), sometimes involving reciprocal definition, rather than straightforward contrast. They are also polythetic in being complementary dimensions of a single classification (Forth 1998, 321–40). Forth also compares Nage classification of spirits with ethnobiological classification, noting for example that forms aligned with birds contrast with those aligned with snakes, speculating whether their spirit categories go beyond resemblance to imply inclusion. He observes an apparent absence of logical transitivity and other ways in which Nage spirit classification diverges from taxonomy. The terms used depend on what features are emphasized. Relationships are semantic rather than strictly logical.

Overlap Between Spirits and the Animal Domain

Finally, we need to explore claims for the overlap of Nuaulu spirit and animal domains. Apart from morphological similarity, spirits and animals share the defining feature of animation, manifest usually in physical movement. It is noticeable that few spirits are plants as such, and spirit concepts are clearly not based on plant prototypes, even though some plants on some occasions may be attributed spirit qualities or be the habitat of spirits (e.g. sago and certain kinds of figs). Human minds everywhere employ an understanding of living bodies to interpret their experience of other objects in their field of perception, and indeed objects that they imagine. Evidence of independent motion encourages recognition of animacy, agency, and intentionality.

The continuity of supernatural and natural, visible and invisible, is highlighted in a number of ways. Some Nuaulu spirit forms and animals appear to be consubstantial, spirit descriptions seemingly describing real animals. Sinne inae, as we have seen, refers simultaneously to a spirit and to certain scarab beetles. These include *Oryctes rhinoceros* and *Mulciper linnaei*, which possess a carapace resembling the final piece of thatch placed along the top of a house roof. Kamanahune, the spirit of a person killed by falling from a tree while hunting cuscus, also refers to the edible long-horn beetle (*kau*) kamanahune, which includes the species *Gnoma giraffe* and *Glenea corona*. Then there are inararai (the frog *Litoria amboinensis*) and *rikune* (various bugs and beetles including *Mictis*, *Oncomeris* and *Euphanta*), all treated as both spirits and animals under different conditions. *Naka*, a term applied to those mythical creatures otherwise called dragons, is used by Nuaulu to label real-world animals they have heard of but never seen, such as the Komodo monitor lizard. Blurring between domains also occurs when spirits colonize animal bodies and influence their behaviour. Thus, a sakahatene can ‘guard’ the jaws of a *nanate*, the death adder *Acanthophis antarcticus*, motivating and directing the bite. Rather differently and less alarmingly, a Peinisa clan ancestral spirit once manifested as a mouse, and the mouse was thereafter respected. This kind of overlap is most obvious where animal species are clan totems, such as turtles, snakes, cuscus, and crocodiles.

Other spirits may not share names with recognizable animals, but be nevertheless associated with them; for example, nocturnal owls—matenu vocalize like *tuku tuku* (*Otus magicus*), and ahane like *sakoa* (*Ninox squamipila*). Some animals are said to

originate from spirits, such as a kind of ant (*isanone*) from *isanone nanie.* So there are few simple breaks at domain boundaries in what we might construe as the real world, and many zones of overlap between the objectively visible and invisible. Spirits are also like animals in the way their names can be used as expletives in verbal abuse. Thus, *hahu mainae*, 'big pig', is an expletive involving a name for an animal that you would avoid using in the forest, while *painakite raia*, referencing bad death through epidemic disease, is a commonly heard expletive around the village. Expletives derived from the names of spirits are regarded as more powerful and dangerous than those derived from animal names.

I have so far used the term 'spirit' to refer to perceived entities conceptualized as homologues with organic species, but there is a further corpus of quasi-organisms that overlap with both spirit forms and real animals in the minds, oral traditions, and ritual practices of Nuaulu. These are monsters of various kinds that appear in stories. They include wildmen (cf. Forth 1998, 105–106) as well as zoological cryptids (Ellen 2017a), and hybrid forms with the body of one type of animal (say, snake) and the head of another (say, chicken). There is a fuzzy boundary between what I define here as spirit entities and what we would describe as a monster. Nuaulu do not have a word for monster as such, although might use Indonesian *raksasa* or *gangil* to refer to giant octopuses and sea creatures with seven heads. Most of these are not accorded proper names, but some, usually those that occur in stories, are named, such as the seven-headed sea snake and *Makaneusaha* (*maka saio sahu*), a large bird-like beast (*kuheba*) with seven heads, reputed to eat young children.

Nuaulu, therefore, recognize spirit categories as they might recognize animal categories, treating them as natural kinds, of equal significance in a shared environment (Ellen 1993a, 176–79; 2006, 200–201; cf. Forth 2004, 74–79; 2009, 509). Given that animals and humans are the models for Nuaulu description and representation of spirits, we might reasonably expect that as lexical and semantic fields they might be organized in essentially the same way (for example Brown et al. 1976). Reciprocal use of terms for transitively-related categories is a widespread feature of both Nuaulu animal and spirit classification (Ellen 1993a, 75–82). As Pascal Boyer (1993, 133) points out, it is not simply that spirit categories are metaphorical of animals, but that terminology and categorization familiar from animal classification often seem to work for spirits. We find devices such as category extension, polytypy, and so on as part of the classificatory apparatus applied to spirits. Cecil Brown et al. (1976, 73) argue that principles originally attributed to biological systematics also extend to non-biological domains, specifically that spirits clearly manifest so-called 'biological principles' devised by Berlin and his associates (Berlin, Breedlove, and Raven, 1973). However, in the light of my Nuaulu data showing the same kinds of phenomenological diversity, the table of Thai spirit-forms included in Brown et al. (1976, 79) seems very tidy. By contrast, the Nuaulu spirit categories are 'unbounded, chaotic and shadowy' (Levy, Mageo, and Howard 1996, 15). There are important differences between animal and spirit classification. While taxonomies, in theory, are undeniably more easily created for invisible creatures where the hard constraints of messy natural discontinuities do not apply, other distinguishing features of

spirits generate obstacles. Simple class inclusion and hierarchy come nowhere near to representing adequately the complex multi-dimensional, overlapping, and ontogenetically challenged categories for spirits described here.

Because the evidence for their existence lies mainly in shared oral descriptions and outward representations, agreement about the precise features of spirit morphology is sometimes lacking. Spirit categories shade into each other endlessly. Moreover, many spirit forms are deliberately anomalous in their representation, with combinations of features which do not lend themselves easily to the relatively simple folk classifications of the natural world. Thus, while the domain of spirits overlaps and draws upon, and is certainly no less real for Nuaulu than, the domain of animals, it is almost as if it comes to echo a world which is unambiguously visible. Moreover, in three particular ways spirits do not behave like living animals and humans: they have supernatural powers to influence the lives of humans, they can move between visibility and invisibility, and they do not reproduce, being apparently immortal and eternal. That living people are often believed to have magical shape-shifting powers underscores the fuzziness of this boundary and of spirit entities more generally.

Juxtaposing classifications of spirits and animals, therefore, not only serves to show the structural similarities with, and the conceptual bases of, categories and their relationship to each other, but also reminds us that spirits are in the normal way experientially incorporeal while animals are first experienced as things, even though Nuaulu know that spirits have bodies and bodies have spirits. Nuaulu must claim to see spirits for them to exist, while animals must have spirits because of the prohibitions and beliefs surrounding them. The notion that animals have spirits presents special problems if you have to kill them. Nuaulu culture resolves this in a very practical way, in rituals connected with wooden meat skewers or *asunaete* through which the soul of a killed animal is recycled into the cosmos to replenish the stock (Ellen 1993a, 280 n. 5; 2017b). Such steps, however, if taken to their logical extreme become highly inconvenient in the normal daily round. Far better to rely upon periodic strategic amnesia and operate with two contradictory conceptions of the animal world: one which stresses unity with humankind (and the privilege of taking life for food), and another which legitimates and makes easier their exploitation (see also Brightman 1993, 179–85).

Conclusion

Data presented here support the claim that humans generally understand spirits and other supernatural beings within a similar framework to that employed for living organisms. These can be described as pseudo-natural kinds because there remain features of their cognition that do not fit the conventional folk-taxonomic model. They are sometimes identified with real animals and people, although more often without a connection with a particular kind of living organism, but with animalistic or humanoid features re-imagined. The data also suggest that we should be cautious in extending further the approach from ethnobiology to other features of the classification of spirits. Most spirits are claimed to display behaviours such as shape-

shifting and dynamic visibility, and are detectable through visual (light) effects, acoustic accompaniments, and other bodily sensations not usually associated with the perception of animals. In particular, the Nuaulu spirit pictures described here suggest cultural models or schema established to varying degrees for Nuaulu spirit entities more generally. If such graphic representations could be shown to be more systematically produced, and were available for inspection, it might be possible to say that they contribute to fixing the image of spirits in the minds of people. This is not the case here, given that graphic representations are rare (in this case prompted by an ethnographer), while we have noted that influence of rock art or the incidental production of images of spirits in other visual media is unlikely. The main evidence for their existence lies in shared oral descriptions.

These conclusions are relevant to studies of the folk classification of spirits more generally, including folk accounts of spirits in Europe and the neo-Europes (e.g. non-aboriginal Australia). As Ronald James (2018, 193) has pointed out, in practice folk definitions of different kinds of spirit are often blurred, frustrating those who have sought tidy definitions and taxonomies. Over-interpretation of lexical and classificatory difference is always a risk. Tight definitions and arrangements distort the dynamic and fluid character of folk knowledge, while attempted definitive lists of supernatural creatures are ultimately futile. It is intriguing, and yet at the same time reassuring, that lumpers and splitters are as much a feature of the practice of folklore taxonomists as of biologists studying scientific taxonomies, and anthropologists and ethnobiologists studying folk classification.

In European folklore traditions there are many pictorial and sculptural representations of these different types, beginning with an entire medieval ark of supernatural entities and an increasingly sophisticated elaboration in painting, including the spectacular depictions of artists such as Hieronymus Bosch and the Victorian Richard Dadd. From the nineteenth century onwards, children's books have increasingly contained depictions of different kinds of fairy, often with new species formed of named types of entity from other cultures and languages; for example, in English literature, the troll from Scandinavia and leprechaun from Ireland. The twentieth- and twenty-first-century works of J. R. R. Tolkien and J. K. Rowling, amongst many others, have shown once again the fertility of the human imagination and our impulse to create worlds of supernatural entities with specific imputed physical characteristics that extend and transform the organisms of the natural world on which they are fundamentally modelled. We can see this too in the compilations of Jorge Luis Borges and Margarita Guerrero (1974) and of Richard Barber and Anne Riches (1975).

The physical forms and manifestations that these entities are believed to take vary enormously but include anthropomorphs with abnormal supernatural behaviours; quasi-anthropomorphs (giants, elves, dwarves, goblins, fairies, gnomes, trolls, pixies); distorted and anomalous creatures, as varied as the chimeras, satyrs, and centaurs of the ancient Greek world; mythical beasts of all varieties (unicorns, griffins, sphinxes, mermaids, and minotaurs: for example Cherry 1995), and the strange quasi-anthropomorphs of the *Nuremberg Chronicle* (the half-man, dog-head, one-eye, umbrella-foot, etc.; Schedel 2001)

and earlier similar European texts. Many of these entities would not normally be regarded as spirits, and in different cosmographies the overlap between spirits, monsters, other mythical beasts, and scientific cryptids is malleable and vague, betwixt and between the world of spirits and the world of animals—creatures of the boundaries and of the peripheries. It is often the physical characteristics that are important in distinguishing different kinds of supernatural entity. Thus, elves may not be considered fairies in a modern post-Victorian context because they have no wings and cannot fly.

In an attempt to substantiate the underlying universal psychology of such forms, Frank Keil (1986) has in experiments with children introduced more unusual animal names—such as hyraxes and throstles to indicate pseudo-natural kinds, without specifying their presumed ontological status. He argues for a similar status to be accorded spirits and animals. Indeed, it is well known that children will invent entire menageries of imaginary creatures to inhabit their world of play which may draw on the traditions listed here but equally depend on their own vivid imaginations and those they share with other children with whom they interact (Ellen 2017a, xv; Boyer 1993, 128–30; see also Arroyo 2020; Root-Bernstein 2014). For Boyer (1993, 139), concept formation and belief fixation are bound to have some influence on the type of beliefs that people entertain about spirit entities: 'subjects must build their representations on the basis of other people's utterances and actions', while 'people's beliefs are underdetermined by the material available', and many cultural categories are 'used as natural kind terms' (Boyer 1993, 132). Thus, the Nuaulu evidence presented here is consistent with Boyer's (1993, 129) contention that imaginary, supernatural, or spirit entities are often treated as if they were living kinds. These data show how the physicality of spirit entities is envisaged and how they are modelled on the cultural knowledge of animals. To see spirits as pseudo-biological entities is not to confuse the spiritual and the material. Spirits are like species, partly because (if dead) they have once been through a living phase in the same way that ancestral spirits are persons because they were once living. The collectivity of Nuaulu spirits is not fully formed in people's minds. Knowledge is always contingent and temporary, individuals forever learning new things and experiencing new relationships with the spirit world, often working them out through ritual practices.

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Notes

[1] Titles such as upue in eastern Ambon-Timor languages are sometimes translated as 'lord' (for example Bolton and Matoke 2005, 117 and 199). There is, however, no gender distinction in the Nuaulu honorific, which explains my preference for the neutral 'honoured'.

[2] Many Tallensi drawings collected by Fortes (1940) in 1931–37 were faint and reproduced poorly on the printed page using technologies then available, even in the 1981 version.

[3] In Deregowski (1978) the pagination cited for this article is erroneous: it should be 293–95 rather than 239–95. Fortes perpetuates the error by mis-citing his own article in Fortes (1981). I am grateful to Ted Goodliffe for pointing this out.

[4] This term is not a binomial but, rather, a bi-segmentally unitary complex lexeme, following the terminology of Harold Conklin (1962) and Berlin, Breedlove, and Raven (1973), and therefore a uninomial. There are similar examples in Nuaulu animal and plant nomenclature (Ellen 1993b, 45 and 49–52; Ellen 2020, 39).

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